

When it is disturbed, it leaps suddenly. The approximate height of the jump is 2 centimetres and the distance covered is very variable and may be up to 10 centimetres. The leap is not quite directional from the point of view of the direction of movement of the ant just prior to the leap. The leap appears to be essentially of the somersault type and therefore, on landing, the ant generally faces the opposite direction. The ant almost always lands on its legs. While jumping, the long mandibles are kept close together and their tips are made to touch the ground or any other substratum, thus providing the fulcrum and the long hind legs are used for the leverage during the process. Sometimes, when the jumping mechanism does not fully operate, the ant just falls or is tossed to one side, without covering any forward distance.

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18. SOME COCCIDS FROM GOA

As far as I am aware no exploratory report on the coccid fauna of Goa has yet been published. In view of the economic importance of coccids, the first record of six species from Goa presented in this paper is expected to be of use for fundamental and applied studies. The specimens were received from the Collector Shri M. Hayat, Department of Zoology, Aligarh Muslim University, Aligarh, to whom the author extends his sincere thanks.

Family PSEUDOCOCCIDAE

Subfamily Pseudococcinae

Tribe Pseudococcini

Ferrisiana virgata (Cockerell)

1893. *Dactylopius virgatus* Cockerell, *The Entom.* 26 : 178.

Material : Several ex. No. 191M, Vasco-da-Gama, 1 Nov. 1967, from *Lantana camera*.

This species is widely distributed in India and has been recorded on 40 different kinds of plants (Ali 1962).

Nipaecoccus vastator (Maskell)

1894. *Dactylopius vastator* Maskell, *Trans. N.Z. Inst.* 27 : 74.

Material : Several ex. No. 197M, Vasco-da-Gama, 1 Nov. 1967, from unidentified host.

In India it is quite common and has been recorded on 23 different hosts largely fruit plants (Ali 1968a).

Tribe Phenacoccini

Centrococcus insolitus (Green)

1908. *Phenacoccus insolitus* Green, *Mem. Dept. Agri. India, Ent.* 2 (2) : 26.

Material : Several ex. No. 192M, Chicolim, 1 Nov. 1967, from *Datura* sp.

This coccid is usually found throughout India on brinjal (Ali, 1968b) but has also been reported on gooseberry (*Physalis maxima*), *Sida cordifolia*, *Abutilon* sp., *Achyranthus* sp., *Tribulus* sp. and *Triumfetta* sp. (Ayyar 1930; Fletcher 1921). It has been observed also on *Malachra capitata* in Coimbatore, on *Achyranthus aspera* in Shoranur, Kerala and on *Wittania somnifera* in Hissar, Haryana (unpublished report by Ali).

Family COCCIDAE

Subfamily Coccinae

Tribe Coccini

Coccus signiferum (Green)

1904. *Lecanium signiferum* Green, *Cocc. Ceylon* 3 : 197.

Material : Several ex. No. 202M, Sanguen, 4 Nov. 1967, on undetermined host.

In India it has been recorded only on plantain leaf (*Musa paradisiaca* at Golconda, Vizagapatam (Ayyar 1930).

Green (1904) considered this species to be a marked variety of *Coccus hesperidum* (Linnaeus), but recently it has been confirmed by

Boratynski & Williams (1964) that this species is a synonym of *C. hesperidum* (Linn.)

Saissetia hemisphaerica (Targioni)

1867. *Lecanium hemisphaericum* Targioni, *Studii sul. Cocc.* : 26.

Material: 4 ex. No. 204M, Sanguen, 4 Nov. 1967, from unidentified host.

In India it is a sporadic pest of *Citrus* spp. and has also been recorded on coffee, tea, fern, etc. (Ali 1968a).

Subfamily Ceroplastinae

Ceroplastes actiniformis (Green)

1896. *Ceroplastes actiniformis* Green, *Indian Mus. Notes* 4 (1) : 8.

Material: Several ex. No. 199M, Madgao, 2 Nov. 1967, from mango.

This coccid has been recorded on the coconut, *Ficus* sp., guava, mango, *Loranthus* sp. and sugarcane (Ali 1968b), further observed on betalnut in Trivandrum (unpublished report by Ali).

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